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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/036,628	12/31/2001	JianMin Wu	INMEP0105US	5838

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EXAMINER

ALI, SYED J

ART UNIT	PAPER NUMBER
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2195

DATE MAILED: 06/21/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/036,628

Applicant(s)

WU ET AL.

Examiner

Syed J. Ali

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 31 December 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 31 December 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date March 12, 2002.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

1. Claims 1-20 are pending in this application.

Claim Objections

2. **Claims 9, 11, and 16-17 are objected to because of the following informalities:**
 - a. In line 2 of claim 9, “to connect” should be deleted.
 - b. In line 4 of claim 11, “and” should be inserted before “a virtual...”.
 - c. There is no period at the end of claims 16 or 17.

Appropriate correction is required.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. **Claim 10 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.**

5. Claim 10 recites the limitation “the forwarding” in line 1. There is insufficient antecedent basis for this limitation in the claim.

Double Patenting

6. A rejection based on double patenting of the "same invention" type finds its support in the language of 35 U.S.C. 101, which states, "whoever invents or discovers any new and useful process ... may obtain a patent therefor..." (Emphasis added). Thus, the term "same invention," in this context, means an invention drawn to identical subject matter. See *Miller v. Eagle Mfg. Co.*, 151 U.S. 186 (1894); *In re Ockert*, 245 F.2d 467, 114 USPQ 330 (CCPA 1957); and *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970).

A statutory type (35 U.S.C. 101) double patenting rejection can be overcome by canceling or amending the conflicting claims so they are no longer coextensive in scope. The filing of a terminal disclaimer cannot overcome a double patenting rejection based upon 35 U.S.C. 101.

7. Claims 1-8 and 11-20 are provisionally rejected under 35 U.S.C. 101 as claiming the same invention as that of claims 1-9, 14-17, 19, and 21-22 of copending Application No. 10/036,001. Claims 1-8 and 11-20 are also provisionally rejected under 35 U.S.C. 101 as claiming the same invention as that of claims 1-3, 5-12, and 14-16 of copending Application No. 10/036,024. This is a provisional double patenting rejection since the conflicting claims have not in fact been patented.

Claim Rejections - 35 USC § 102

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

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A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

9. **Claims 1-3, 7-8, 11-17, and 19-20 are rejected under 35 U.S.C. 102(e) as being anticipated by Trethewey (US 2003/0056002).**

10. As per claim 1, Trethewey teaches the invention as claimed, including a Voice-over-Internet Protocol (VoIP) system (paragraphs 0031-0032), comprising:

a network including at least two VoIP proxy servers configured to allow voice data to be transmitted and received over the network (paragraph 0012);

at least one VoIP client operatively coupled to the network to transmit and receive voice data over the network; wherein the at least one VoIP client connects to one of the at least two VoIP proxy servers in order to transmit and receive voice data (paragraph 0013); and

a network connection coupled to the at least two VoIP proxy servers for sharing workload data therebetween and the workload data is used to determine which of the at least two VoIP proxy servers the at least one VoIP client connects to in order to transmit and receive voice data (paragraphs 0019, 0023).

11. As per claim 2, Trethewey teaches the invention as claimed, including the VoIP system according to claim 1, wherein one of the at least two VoIP proxy servers is a primary VoIP proxy server configured to automatically balance workload between the at least two VoIP proxy servers based on workload data (paragraph 0019).

12. As per claim 3, Trethewey teaches the invention as claimed, including the VoIP system according to claim 2, wherein the one of the at least two VoIP proxy servers provides an identity to the at least one VoIP client in response to a client request to connect from the at least one VoIP client (paragraph 0023).

13. As per claim 7, Trethewey teaches the invention as claimed, including the VoIP system according to claim 1, wherein the at least two VoIP proxy servers transmit workload data therebetween, periodically (paragraph 0038-0039).

14. As per claim 8, Trethewey teaches the invention as claimed, including the VoIP system according to claim 1, wherein the at least two VoIP proxy servers transmit workload data therebetween, spontaneously (paragraph 0038-0039).

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15. As per claim 11, Trethewey teaches the invention as claimed, including the VoIP system according to claim 1, wherein the network is composed of one or more networks selected from a proprietary network, a network of leased facilities, the Internet, an Intranet, a wide-area network (WAN), a local-area network (LAN), a virtual private network (VPN) (paragraph 0014, 0031-0032).

16. As per claim 12, Trethewey teaches the invention as claimed, including the VoIP system according to claim 1, further including the at least one VoIP client coupled to a gateway coupled to the network, wherein the gateway controls access to the network (paragraph 0015).

17. As per claim 13, Trethewey teaches the invention as claimed, including the VoIP system according to claim 12, wherein the gateway comprises one or more of a VoIP gateway, a VoIP PTSN gateway, a media gateway, a router and an H.323 gateway (paragraph 0014, 0031-0032).

18. As per claim 14, Trethewey teaches the invention as claimed, including the VoIP system according to claim 1, wherein the at least one VoIP client comprises one or more of an IP phone, a plain old telephone system (POTS) phone, a cell phone, a satellite phone, a microphone, a computer video camera with a microphone and, a multi-media computer configured to transmit and receive voice data (paragraph 0014, 0031-0032).

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19. As per claim 15, Trethewey teaches the invention as claimed, including a method for balancing workload on a Voice-over-Internet Protocol (VoIP) system including at least one VoIP client (paragraph 0012) coupled to a network including at least two VoIP proxy servers (paragraph 0013) and a network connection coupled to the at least two VoIP proxy servers for sharing workload data therebetween (paragraphs 0019, 0023), comprising the steps of:

- (a) connecting to one of the at least two VoIP proxy servers by the at least one VoIP client in order to transmit and receive voice data (paragraph 0023);
- (b) sharing workload data between the at least two VoIP proxy servers coupled to a network connection (paragraphs 0019, 0023); and
- (c) determining which of the at least two VoIP proxy servers the at least one VoIP client connects to in order to transmit and receive voice data is based on the workload data (paragraphs 0019, 0023).

20. As per claim 16, Trethewey teaches the invention as claimed, including the method of claim 15, further including the step of balancing workload automatically between the at least two VoIP proxy servers based on the workload data (paragraphs 0019, 0023).

21. As per claim 17, Trethewey teaches the invention as claimed, including the step of providing an identity of the one of the at least two VoIP proxy servers with a lower workload to the at least one VoIP client in response to a client request to connect from the at least one VoIP client (paragraph 0023).

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22. As per claim 19, Trethewey teaches the invention as claimed, including the method of claim 15, further including the step of transmitting and receiving voice and video data (paragraphs 0031-0032).

23. As per claim 20, Trethewey teaches the invention as claimed, including the method of claim 15, further including the step of connecting to the first VoIP proxy server determined to have a workload below the predefined threshold by the at least one VoIP client in order to transmit and receive voice data (paragraphs 0031-0032).

Claim Rejections - 35 USC § 103

24. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

25. **Claims 4-6, 9-10, and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Trethewey.**

26. As per claims 4-5, 9-10, and 18, Trethewey does not specifically teaches the invention as claimed, including the VoIP system according to claim 3, wherein the at least one VoIP client connects to the one of the at least two VoIP proxy servers which has a workload below a predefined threshold or the first VoIP proxy server determined to have a workload below a

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predefined threshold in order to transmit and receive voice data. Trethewey also does not specifically state that the load-balancing algorithm forwards requests among proxy servers until a server is found that has a workload below a predetermined threshold. However, "Official Notice" is taken that these are well-known load balancing methods, and Trethewey specifies that the load balancer may use any conventional selection algorithm (paragraph 0023). Thus, it would have been an obvious modification to one of ordinary skill in the art to assign the client request to the server that has a workload below a particular threshold.

27. As per claim 6, Trethewey teaches the invention as claimed, including the VoIP system according to claim 5, wherein the primary VoIP proxy server forwards the client request to connect and an identity of the at least one VoIP client to another one of the at least two VoIP proxy servers based on workload data shared by the at least two VoIP proxy servers (paragraph 0023).

Conclusion

28. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The additional cited references discuss some well-known load balancing algorithms, including forwarding of requests until a server is found that is suitable for servicing a request. The claimed load balancing methods are widely used in the prior art, where the main discrepancy appears to be the use of the VoIP protocol. However, the application of well-known load balancing methods to Internet telephony is not a significant improvement over the prior art. The cited references are far from an exhaustive list of the relevant prior art; if there are features of

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VoIP load balancing that greatly differ from any other type of network load balancing, the claims should be amended to reflect those differences.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Syed J. Ali whose telephone number is (571) 272-3769. The examiner can normally be reached on Mon-Fri 8-5:30, 2nd Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Meng-Ai T. An can be reached on (571) 272-3756. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Syed Ali
June 13, 2005


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